

AD-A073 109

ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/G 4/2
14818C LANCE, MISSILE NUMBER 3396, ROUND NUMBER 333 APL.(U)
JUN 79

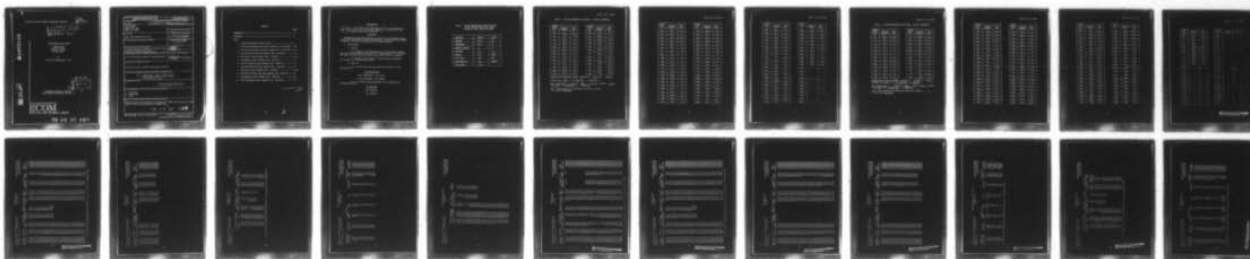
UNCLASSIFIED

ERADCOM/ASL-DR-1029

NL

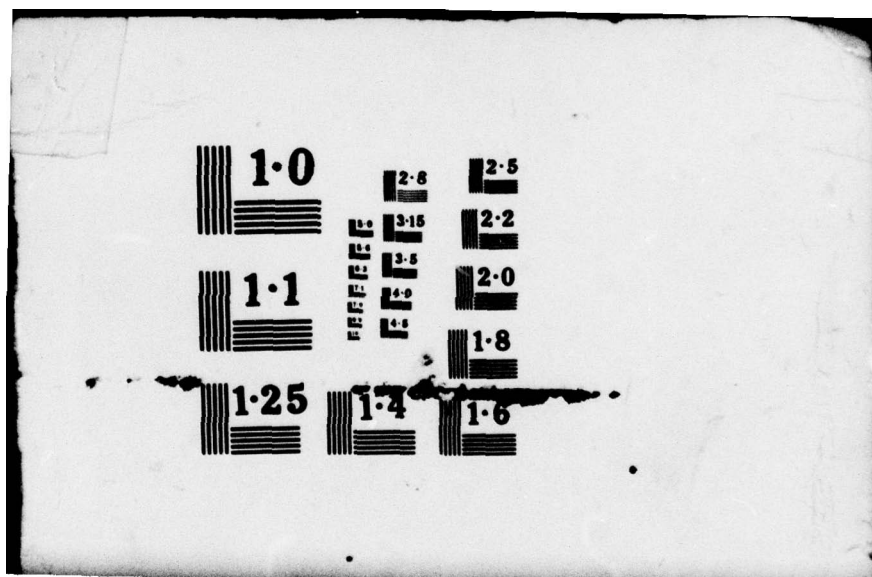
[OF]
AD
A073 09

SEE
PAGE 8



END
DATE
FILMED

9 79
DDC



APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

DR 1029
June 1979

AD

LEVEL II

12
P.S.

AD A 073109

METEOROLOGICAL DATA REPORT

14818C Lance
Missile No. 3396
Round No. 333 APL
21 June 1979

by

White Sands Meteorological Team

DDC FILE COPY

DDC
RECEIVED
AUG 27 1979
A

✓ ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

ECOM

UNITED STATES ARMY ELECTRONICS COMMAND

79 08 27 046

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER DR 1029	2. GOVT ACCESSION NO. (14) ERADCOM	3. RECIPIENT'S CATALOG NUMBER ASL-DR-1029
4. TITLE (and Subtitle) 14818C Lance Missile No. 3396 Round No. 333 APL	5. TYPE OF REPORT & PERIOD COVERED	
7. AUTHOR(s) White Sands Meteorological Team	6. PERFORMING ORG. REPORT NUMBER	
9. PERFORMING ORGANIZATION NAME AND ADDRESS	8. CONTRACT OR GRANT NUMBER(s) (16) DA Task (17) 1T6657-2D126402	
11. CONTROLLING OFFICE NAME AND ADDRESS US Army Electronics Research & Development Comd Atmospheric Sciences Laboratory White Sands Missile Range, New Mexico	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS (12) 26p	
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) US Army Electronics Research & Development Comd	12. REPORT DATE (11) June 1979	
	13. NUMBER OF PAGES	
	15. SECURITY CLASS. (of this report) UNCLASSIFIED	
15a. DECLASSIFICATION/DOWNGRADING SCHEDULE		
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) (6) 14818C Lance, Missile Number 3396, Round Number 333 APL.		
18. SUPPLEMENTARY NOTES (7) Meteorological data rept.		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) 1. Ballistics 2. Meteorology 3. Wind		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of 14818C Lance, Missile No. 3396 Round No. 333 APL, are presented in tabular form. 79 08 27 046		

CONTENTS

	PAGE
INTRODUCTION -----	1
DISCUSSION -----	1

TABLES

1. Surface Observations Taken at LC-39 -----	2
2. Pilot-Balloon-Measured Wind Data, Release No. 1 at 0850 MDT --	3-5
3. Pilot-Balloon-Measured Wind Data, Release No. 2 at 0910 MDT --	6-9
4. WSD Significant Level Data (Release Time: 0750 MST) -----	10
5. WSD Upper Air Data (Release Time: 0750 MST) -----	11-13
6. WSD Mandatory Levels (Release Time: 0750 MST) -----	14
7. WSD MRN Mandatory Levels (Release Time: 0750 MST) -----	15
8. APA Significant Level Data (Release Time: 0750 MST) -----	16
9. APA Upper Air Data (Release Time: 0750 MST) -----	17-20
10. SMR MRN Significant Level Data (Release Time: 0750 MST) -----	21
11. SMR Mandatory Levels (Release Time: 0750 MST) -----	22
12. SMR MRN Mandatory Levels (Release Time: 0750 MST) -----	23

Accession For	
NTIS GRAB	<input checked="checked" type="checkbox"/>
DOC TAB	<input type="checkbox"/>
Unpublished	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
A	Avail and/or special

INTRODUCTION

148100 Lance, Missile Number 3396, Round Number 333 APL, was launched from LC-39, White Sands Missile Range (WSMR), New Mexico, at 0910 MDT, 21 June 1979. The scheduled launch time was 0900 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature ($^{\circ}\text{C}$), relative humidity, dew point ($^{\circ}\text{C}$), density (gm/m^3), wind direction and speed, and cloud cover were made at the LC-39 Met Site at T-0 minutes.

(2) Monitor of wind speed and direction from one anemometer was provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from RAPTS T-9 pibal observation at:

SITE AND ALTITUDE

LC-39 3060 meters T-10 minutes

LC-39 3660 meters T-10 minutes

(2) Air structure data (rawinsonde) were collected at the following Met Sites.

SITE AND TIME

WSD 0750 MST

APA 0750 MST

TABLE 1. SURFACE OBSERVATIONS TAKEN AT 0910 MDT,
21 JUNE 1979 AT LC-39, 14818C LANCE,
MISSILE NO. 3396, ROUND NO. 333 APL

ELEVATION	4063.75	FT/MSL
PRESSURE	881.4	MBS
TEMPERATURE	26.6	°C
RELATIVE HUMIDITY	41	%
DEW POINT	12.2	°C
DENSITY	1017	GM/M ³
WIND SPEED	Calm	MPH
WIND DIRECTION	Calm	DEGREES
CLOUD COVER	Clear	

TABLE 2. PILOT-BALLOON-MEASURED WIND DATA (30-METER INCREMENTS)

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
SFC	Calm	Calm
30	129.1	1.0
60	129.2	2.0
90	129.2	3.0
120	129.2	4.0
150	129.2	5.0
180	129.2	6.0
210	130.9	6.7
240	132.8	7.3
270	134.4	8.0
300	135.8	8.6
330	136.9	9.3
360	137.8	9.6

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
390	138.3	9.6
420	138.9	9.5
450	139.5	9.5
480	140.1	9.5
510	141.3	9.5
540	146.4	9.6
570	151.3	9.8
600	156.1	10.1
630	160.5	10.4
660	164.6	10.8
690	165.8	10.9
720	166.6	10.9
750	167.3	11.0

Release Point Coordinates (WSTM): X486,037.24 Y486,037.24 H3977.30

Released from LC-39 on 21 June 1979 at 0850 MDT .

Type 14818C Lance , Missile No. 3396 , Round No. 333 APL launched
from LC-39 on 21 June 1979 at 0910 MDT .

NOTE: Wind directions are referenced to the firing azimuth
or true north true north .

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
780	168.1	11.0
810	168.9	11.1
840	169.2	10.8
870	169.2	10.3
900	169.3	9.9
930	169.4	9.5
960	169.5	9.0
990	170.6	8.8
1020	172.3	8.7
1050	174.1	8.5
1080	175.9	8.4
1110	177.8	8.3
1140	177.8	8.2
1170	176.4	8.1
1200	174.9	8.0
1230	173.4	7.9
1260	171.8	7.7
1290	170.4	7.8
1320	169.2	7.9
1350	168.8	8.0
1380	166.8	8.1
1410	165.7	8.2

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
1440	165.9	8.3
1470	166.9	8.4
1500	167.3	8.5
1530	168.8	8.5
1560	169.7	8.6
1590	171.3	8.3
1620	173.3	9.0
1650	175.1	9.2
1680	176.8	9.5
1710	178.5	9.7
1740	179.9	10.1
1770	181.1	10.6
1800	182.3	11.0
1830	183.3	11.5
1860	184.3	11.9
1890	183.7	12.6
1920	183.2	13.3
1950	182.7	13.9
1980	182.2	14.6
2010	181.9	15.3
2040	181.6	15.9
2070	181.4	16.5

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
2100	181.2	17.0
2130	181.1	17.6
2160	180.8	18.0
2190	180.3	18.1
2220	179.9	18.1
2250	179.4	18.2
2280	178.9	18.3
2310	178.4	18.2
2340	177.9	18.0
2370	177.3	17.9
2400	176.7	17.7
2430	176.2	17.6
2460	182.8	17.3
2490	190.7	17.3
2520	198.5	17.6
2550	205.8	18.3
2580	211.2	18.8
2610	207.4	17.0
2640	202.8	15.3
2670	197.0	13.8
2700	189.9	12.4
2730	181.1	11.1

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
2760	170.0	10.0
2790	156.7	9.3
2820	142.2	9.2
2850	128.3	9.7
2880	135.0	8.8
2910	150.1	8.0
2940	167.3	7.8
2970	183.7	8.3
3000	195.4	9.3
3030	193.7	9.8
3060	192.1	10.4
3090		
3120		
3150		
3180		
3210		
3240		
3270		
3300		
3330		
3360		
3390		

TABLE 3. PILOT-BALLOON-MEASURED WIND DATA (30-METER INCREMENTS)

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
SFC	Calm	Calm
30	147.7	0.4
60	147.7	0.7
90	147.7	1.1
120	147.7	1.4
150	147.7	1.7
180	147.7	2.2
210	151.6	3.0
240	154.5	3.9
270	156.3	4.9
300	157.4	5.9
330	158.3	6.9
360	157.0	7.7

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
390	153.9	8.5
420	151.2	9.2
450	149.0	10.0
480	147.1	10.8
510	145.7	11.5
540	146.2	11.6
570	146.7	11.8
600	147.2	11.9
630	147.6	12.0
660	148.1	12.1
690	151.8	12.4
720	155.7	12.8
750	159.4	13.3

Release Point Coordinates (WSTM): X486,037.24 Y486,037.24 H3977.30
 Released from LC-39 on 21 June 1979 at 0910 MDT.

Type 14818C Lance, Missile No. 3396, Round No. 333 APL launched
 from LC-39 on 21 June 1979 at 0910 MDT.

NOTE: Wind directions are referenced to the firing azimuth _____
 or true north true north.

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
780	162.8	13.8
810	166.0	14.3
840	166.8	14.5
870	166.8	14.6
900	166.8	14.7
930	166.8	14.8
960	166.8	14.9
990	166.3	14.6
1020	165.5	14.0
1050	164.7	13.4
1080	163.7	12.9
1110	162.7	12.3
1140	164.0	12.1
1170	167.2	12.1
1200	170.5	12.5
1230	173.7	12.4
1260	176.8	12.5
1290	179.5	12.6
1320	182.0	12.6
1350	184.5	12.6
1380	187.0	12.6
1410	189.4	12.7

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
1440	189.8	12.4
1470	188.7	11.8
1500	187.5	11.2
1530	186.1	10.7
1560	184.6	10.1
1590	181.1	9.7
1620	176.6	9.5
1650	171.8	9.3
1680	166.9	9.2
1710	161.8	9.1
1740	160.5	9.2
1770	160.3	9.2
1800	160.0	9.3
1830	159.7	9.3
1860	159.5	9.4
1890	162.0	9.4
1920	164.8	9.3
1950	167.5	9.3
1980	170.3	9.3
2010	172.9	9.4
2040	174.4	9.9
2070	175.8	10.4

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
2100	177.1	10.8
2130	178.3	11.3
2160	179.1	11.8
2190	179.5	12.6
2220	179.8	13.3
2250	180.0	14.0
2280	180.3	14.7
2310	180.7	15.3
2340	181.2	15.7
2370	181.7	16.2
2400	182.2	16.6
2430	182.6	17.1
2460	183.3	17.4
2490	184.0	17.7
2520	184.7	18.0
2550	185.3	18.3
2580	186.0	18.6
2610	187.0	18.9
2640	187.9	19.1
2670	188.8	19.3
2700	189.7	19.6
2730	190.3	19.7

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
2760	190.5	19.5
2790	190.7	19.4
2820	190.9	19.3
2850	191.1	19.2
2880	190.8	18.7
2910	190.4	18.2
2940	189.9	17.6
2970	189.5	17.1
3000	189.2	16.5
3030	190.7	15.6
3060	192.4	14.7
3090	194.3	13.8
3120	196.5	12.9
3150	198.5	12.4
3180	200.0	12.2
3210	201.7	12.0
3240	203.3	11.9
3270	205.0	11.7
3300	204.9	11.8
3330	204.5	12.0
3360	204.1	12.1
3390	203.7	12.2

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
3420	203.5	12.3
3450	203.7	12.3
3480	204.0	12.3
3510	204.2	12.3
3540	204.4	12.3
3570	203.9	12.7
3600	203.7	13.2
3630	202.4	13.7
3660	201.7	14.2
3690		
3720		
3750		
3780		
3810		
3840		
3870		
3900		
3930		
3960		
3990		
4020		

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
4050		
4080		
4110		
4140		
4170		
4200		
4230		
4260		
4290		
4320		
4350		
4380		
4410		
4440		
4470		
4500		
4530		
4560		
4590		
4620		
4650		

GEODLTIC COORJINATES
32-40043 LAT DEG
106-37033 LON DEG

SIGNIFICANT LEVEL DATA
1720020292
WHITE SANDS

STATION ALTITUDE 3989.00 FEET MSL
21 JUNE 79 0750 HRS WST
ASCENSION NO. 292

PRESSURE	GEOMETRIC ALTITUDE	TEMPERATURE	REL. HUM.
MILLIBARS	MSL FEET	AIR DEWPOINT DEGREES CENTIGRADE	PERCENT
883.8	3989.0	10.7	38.0
850.0	5112.3	8.0	37.0
814.9	5319.6	6.9	42.0
770.0	7332.6	7.0	43.0
760.4	8255.0	5.0	38.0
700.0	10611.0	8.0	38.0
630.2	13491.3	-4.7	43.0
587.1	15389.3	-4.7	63.0
580.4	15594.6	-6.1	51.0
563.6	16475.5	-25.2	11.0
500.0	19610.1	-31.6	10.0
400.0	25230.7	-40.8	12.0
366.2	29421.2	-47.0	13.0
327.3	30057.0	-48.0	12.0
317.4	30781.8	-49.0	13.0
300.0	32098.2	-29.5	
265.0	34933.8	-32.6	
250.0	36246.9	-38.9	
200.0	41097.8	-42.0	
161.2	43144.3	-54.7	
150.0	47001.8	-60.0	
126.6	50414.4	-63.5	
		-66.2	

STATION ALTITUDE 3999.00 FEET MSL
21 JUNE 79 0750 HRS MST
ASCENSION NO. 292

UPPER AIR DATA
1720020294
WHITE SANDS

GEODETTIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
3999.0	855.8	26.1	38.0	1023.2	675.5	0	0	1.000282
4000.0	863.5	26.1	38.0	1022.9	675.3	152.3	0	1.000262
4500.0	863.3	24.9	37.5	1009.5	674.3	152.3	2.3	1.000276
5000.0	853.9	23.8	37.1	996.4	672.9	152.3	4.5	1.000269
5500.0	828.4	23.1	38.4	981.1	672.1	152.3	6.7	1.000266
6000.0	824.0	22.7	40.7	965.4	671.9	153.9	7.4	1.000264
6500.0	809.8	22.1	42.1	950.4	671.2	161.4	7.3	1.000261
7000.0	795.6	21.3	42.4	936.4	670.3	157.9	6.1	1.000256
7500.0	781.8	20.6	42.7	922.0	669.3	154.6	5.1	1.000251
8000.0	768.2	19.9	42.2	908.0	668.5	150.9	5.6	1.000246
8500.0	754.7	19.4	38.9	894.0	667.9	154.0	6.5	1.000238
9000.0	741.4	18.3	38.7	882.3	666.5	150.3	8.1	1.000233
9500.0	728.3	17.2	36.5	870.2	665.2	166.9	10.1	1.000228
10000.0	715.4	16.1	38.3	858.3	663.9	171.4	12.3	1.000223
10500.0	702.8	15.0	38.0	846.5	662.5	171.6	12.9	1.000218
11000.0	690.1	13.7	38.7	835.2	661.0	172.2	13.1	1.000214
11500.0	677.7	12.4	39.5	824.1	659.4	173.0	12.3	1.000210
12000.0	665.4	11.0	40.4	813.2	657.7	174.8	11.5	1.000206
12500.0	653.4	9.7	41.3	802.5	656.1	177.7	10.7	1.000202
13000.0	641.6	8.3	42.1	791.9	654.5	180.9	10.2	1.000199
13500.0	630.0	7.0	43.1	781.5	652.9	184.4	9.8	1.000195
14000.0	618.4	5.6	42.4	770.8	651.3	187.5	9.7	1.000193
14500.0	606.3	4.1	43.0	760.4	649.6	190.1	9.6	1.000191
15000.0	595.7	2.7	58.9	750.2	647.9	191.8	10.1	1.000189
15500.0	584.7	2.1	58.6	737.9	647.2	190.3	11.1	1.000185
16000.0	573.8	2.6	35.4	723.5	647.5	189.3	11.7	1.000174
16500.0	563.1	2.0	11.0	712.4	646.5	188.5	12.1	1.000163
17000.0	552.4	.9	10.8	701.3	645.1	189.8	10.7	1.000160
17500.0	542.9	-2	10.7	691.5	643.7	191.4	9.4	1.000157
18000.0	531.7	-1.4	10.5	681.2	642.4	193.2	6.5	1.000155
18500.0	521.7	-2.5	10.4	671.2	641.1	192.7	7.8	1.000152
19000.0	511.6	-3.6	10.2	661.2	639.7	189.4	7.5	1.000150
19500.0	502.1	-4.8	10.0	651.5	638.3	182.7	7.3	1.000147
20000.0	492.5	-5.9	10.1	641.7	636.9	172.7	7.5	1.000145
20500.0	482.5	-7.2	10.3	631.9	635.5	165.0	7.9	1.000143
21000.0	473.2	-8.4	10.5	622.3	634.0	161.0	8.4	1.000140
21500.0	463.9	-9.6	10.7	612.9	632.0	157.2	8.4	1.000138
22000.0	454.7	-10.0	10.9	603.7	631.1	153.5	6.1	1.000136
22500.0	445.3	-12.0	11.0	594.5	629.0	143.1	6.6	1.000134
23000.0	437.0	-13.2	11.2	575.0	625.2	123.9	5.5	1.000132

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

UPPER AIR DATA
1720020292
WHITE SANDS

STATION ALTITUDE 3089.00 FEET MSL
21 JUNE 79 0750 HRS MST
ASCENSION NO. 292

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
23500.0	428.5	-14.4	-33.0	11.4	576.8	626.7	113.8	4.2	1.000130
24000.0	420.0	-15.5	-33.8	11.5	568.1	625.2	123.1	3.3	1.000126
24500.0	411.8	-16.8	-39.6	11.7	559.5	623.3	123.1	4.5	1.000128
25000.0	403.7	-18.0	-40.4	11.9	551.2	622.5	173.8	6.2	1.000124
25500.0	395.4	-19.2	-41.2	12.1	542.5	620.9	191.2	7.8	1.000122
26000.0	387.4	-20.2	-42.0	12.2	533.5	619.3	192.5	7.9	1.000120
26500.0	379.5	-21.3	-42.5	12.3	524.8	618.3	211.2	7.4	1.000118
27000.0	371.7	-22.3	-43.5	12.4	515.2	617.0	235.9	8.8	1.000116
27500.0	364.1	-23.4	-44.3	12.5	507.7	615.7	232.5	11.7	1.000114
28000.0	356.6	-24.4	-45.1	12.7	499.4	614.3	257.2	14.9	1.000112
28500.0	349.3	-25.5	-45.8	12.8	491.2	613.2	263.0	17.9	1.000110
29000.0	342.1	-26.5	-46.8	12.9	483.2	611.8	262.8	19.2	1.000108
29500.0	335.1	-27.4	-47.3	12.9	475.0	610.7	263.2	20.5	1.000106
30000.0	328.1	-27.4	-47.9	12.1	465.0	610.7	268.2	22.1	1.000104
30500.0	321.2	-28.7	-48.6	12.6	457.7	609.1	270.1	23.3	1.000102
31000.0	314.4	-30.0	-51.0	10.8**	450.5	607.5	263.7	26.6	1.000101
31500.0	307.8	-31.2	-55.9	5.9**	443.1	604.5	267.4	29.4	1.000099
32000.0	301.5	-32.4	-70.9	1.0**	435.9	604.5	263.0	32.7	1.000097
32500.0	294.8	-33.5			428.5	603.1	260.0	34.6	1.000095
33000.0	288.4	-34.5			421.2	601.7	259.5	35.8	1.000094
33500.0	282.2	-35.7			414.0	600.3	261.5	36.1	1.000092
34000.0	276.1	-36.8			407.0	598.9	263.9	36.5	1.000091
34500.0	270.1	-37.9			400.1	597.5	265.9	38.5	1.000089
35000.0	264.5	-39.0			393.3	596.1	263.0	40.4	1.000088
35500.0	258.5	-40.2			386.0	594.6	270.5	42.0	1.000086
36000.0	252.8	-41.4			378.0	593.0	275.1	42.9	1.000085
36500.0	247.1	-42.7			373.5	591.4	275.9	42.8	1.000083
37000.0	241.5	-44.0			367.1	589.3	277.7	43.4	1.000082
37500.0	236.0	-45.3			360.8	588.1	273.5	44.7	1.000080
38000.0	230.6	-46.6			354.6	586.4	279.7	46.4	1.000079
38500.0	225.3	-47.9			348.5	584.7	260.9	48.2	1.000078
39000.0	220.2	-49.2			342.6	583.0	261.8	49.4	1.000076
39500.0	215.2	-50.5			336.7	581.3	262.2	50.2	1.000075
40000.0	210.5	-51.8			331.0	579.3	281.9	50.3	1.000074
40500.0	205.5	-53.2			325.4	577.3	281.2	50.8	1.000072
41000.0	200.8	-54.5			319.5	576.1	281.4	50.4	1.000071
41500.0	195.1	-55.8			314.2	574.4	281.9	49.8	1.000070
42000.0	191.4	-57.1			308.6	572.7	281.0	49.5	1.000069
42500.0	186.9	-58.3			303.1	571.0	279.8	49.3	1.000068
43000.0	182.5	-59.6			297.7	569.3	277.6	49.9	1.000066

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 9959.00 FEET MSL 21 JUNE 79 0750 HRS MST ASCENSION NO. 292				UPPER AIR DATA 1720020294 WHITE SANDS		GEODETIC COORDINATES 32.40043 LAT DEG 106.37033 LON DEG	
GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ WATER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	INDEX OF REFRACTION
4350.0	176.1	-60.3		221.5	566.3	275.5	1.000065
4400.0	175.6	-60.8		223.0	567.7	274.0	1.000063
4450.0	169.9	-61.2		270.7	567.1	272.7	1.000062
4500.0	163.5	-61.7		272.6	568.5	272.9	1.000061
4550.0	161.5	-62.1		266.5	565.9	273.7	1.000059
4600.0	157.3	-62.6		260.7	565.3	274.5	1.000058
4650.0	153.7	-63.0		254.9	564.7	275.0	1.000057
4700.0	150.0	-63.5		249.3	564.1	275.5	1.000056
4750.0	146.3	-63.9		243.6	563.6	273.9	1.000054
4800.0	142.7	-64.3		236.1	563.0	272.2	1.000053
4850.0	139.2	-64.7		232.7	562.5	271.8	1.000052
4900.0	135.8	-65.1		227.4	562.0	271.5	1.000051
4950.0	132.5	-65.5		222.2	561.4		1.000050
5000.0	129.2	-65.9		217.2	560.9		1.000048

STATION ALTITUDE 3989.00 FEET MSL
21 JUNE 79 0750 HRS MST
ASCENSION NO. 242

MANDATORY LEVELS
1720020292
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

PRESSURE	GEOPOTENTIAL	MILLIBARS	FEET	TEMPERATURE		REL. HUM.	WIND DATA	
				AIR	DEWPOINT		DIRECTION	SPEED
				DEGREES	CENTIGRADE	PERCENT	DEGREES(TN)	KNOTS
850.0	5109.			23.5	8.0	37.	152.3	4.9
800.0	6841.			21.6	8.2	42.	159.3	6.5
750.0	8670.			19.1	4.7	39.	156.7	7.1
700.0	10600.			14.6	.6	30.	171.8	13.0
650.0	12638.			9.3	-3.1	42.	178.6	10.5
600.0	14793.			5.3	-7.3	57.	131.2	9.9
550.0	17099.			.7	-26.6	11.	190.2	10.4
500.0	19592.			-5.0	-31.6	10.	180.6	7.3
450.0	22265.			-11.4	-36.0	11.	148.6	7.4
400.0	25178.			-18.6	-40.8	12.	177.3	6.9
350.0	28411.			-25.4	-45.6	13.	259.7	17.7
300.0	32033.			-32.6			262.4	33.3
250.0	36166.			-42.0			274.4	42.8
200.0	40987.			-54.7			281.5	50.3
175.0	43746.			-60.6			274.4	51.4
150.0	46873.			-63.5			273.5	44.4

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 9989.00 FEET MSL
21 JUNE 79 0750 HRS MST
ASCENSION NO. 292

MRN MANDATORY LEVELS
1720020292
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

GEOPOTENTIAL ALTITUDE DECIMETERS	DIRECTION DEG (TN)	SPEED MPS	WIND DATA		E-W MPS	DEW PT DEP DEG C	TEMPERATURE		PRESSURE MILLIBARS
			N-S MPS	TEMPERATURE AIR DEG C					
1429.	276.	23.	-2.	23.	23.	99	-63.5	1.500+2	
1333.	274.	26.	-2.	26.	20.	99	-60.6	1.750+2	
1249.	251.	26.	-5.	25.	25.	99	-54.7	2.000+2	
1402.	274.	22.	-2.	22.	22.	99	-42.0	2.500+2	
978.	282.	17.	2.	17.	17.	99	-32.6	3.000+2	
669.	260.	9.	2.	9.	9.	20	-25.4	3.500+2	
758.	177.	4.	4.	4.	-0.	22	-18.6	4.000+2	
673.	149.	4.	3.	3.	-2.	25	-11.4	4.500+2	
597.	161.	4.	4.	4.	0.	27	-5.0	5.000+2	
521.	190.	5.	5.	5.	1.	27	.7	5.500+2	
451.	191.	5.	5.	5.	1.	00	3.3	6.000+2	
385.	179.	5.	5.	5.	-0.	12	9.3	6.500+2	
323.	172.	7.	7.	7.	-1.	14	14.6	7.000+2	
264.	157.	4.	3.	3.	-1.	14	19.1	7.500+2	
209.	159.	3.	3.	3.	-1.	13	21.6	8.000+2	
150.	152.	3.	2.	2.	-1.	10	23.5	8.500+2	

STATION ALTITUDE 3951.40 FEET MSL
21 JUL 79 0750 HRS MST
ASCENSION 10. 35

SIGNIFICANT LEVEL DATA
1720050033
APACHE

GEODLTIC COORDINATES
32.62700 LAT DEG
106.39352 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT
285.3	3951.4	23.0	34.0
290.0	3115.0	22.5	44.0
765.8	6083.9	19.8	44.0
700.0	10600.7	13.5	46.0
644.4	12066.1	7.3	47.0
600.6	14756.4	2.0	57.0
574.8	15217.5	-1.1	37.0
550.2	16689.0	-6.0	17.0
500.0	19551.3	-20.0	19.0
400.0	25137.3	-23.6	20.0
370.6	26967.7	-26.3	18.0
357.4	27555.6	-28.6	23.0
331.6	29630.7	-34.9	23.0
300.0	31262.2	-35.6	23.0
295.0	32347.8	-40.1	
272.0	34190.1	-43.5	
250.0	36072.0	-50.3	
224.4	38429.9	-56.1	
200.0	40373.5	-63.3	
192.2	42006.2	-64.5	
155.2	44603.5	-65.8	
150.0	46753.9	-67.5	
145.2	47407.3	-66.9	
123.2	50604.7	-70.3	
119.6	51274.8	-69.0	
106.8	53542.2	-71.8	
100.0	54805.2	-71.4	
89.6	56859.5	-67.3	
86.0	57733.3	-66.5	
84.1	58199.1	-59.4	
77.2	59906.3	-56.9	
70.0	61896.5	-56.7	
56.6	66315.9	-54.4	
50.0	68911.7	-51.7	
47.0	70206.6		
44.6	71313.1		
33.0	77733.2		

GEODETIC COORDINATES
32.62700 LAT DEG
106.39352 LON DEG

UPPER AIR DATA
1720030055
APACHE

STATION ALTITUDE 3951.40 FEET MSL
21 JUNE 79 0750 HRS MST
ADJUNCTION NO. 59

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
3951.4	855.3	23.0	34.0	1037.1	671.3	350.0	2.9	1.000272
4000.0	835.8	23.0	34.4	1035.4	671.3			1.000273
4500.0	868.5	22.8	38.7	1017.6	671.7			1.000273
5000.0	853.4	22.5	43.0	1000.2	671.7			1.000274
5500.0	838.6	22.1	44.0	984.0	671.2			1.000270
6000.0	824.0	21.7	44.0	968.4	670.7			1.000266
6500.0	809.6	21.2	44.0	953.1	670.2			1.000261
7000.0	795.5	20.8	44.0	938.9	669.0			1.000256
7500.0	781.7	20.3	44.0	923.1	669.1			1.000252
8000.0	768.1	19.9	44.0	908.5	669.0			1.000248
8500.0	754.5	19.8	44.7	896.1	667.2			1.000243
9000.0	741.2	17.5	45.5	884.2	665.7			1.000238
9500.0	728.1	16.3	46.3	872.5	664.2			1.000233
10000.0	715.2	15.0	47.0	860.5	662.7			1.000229
10500.0	702.5	13.8	47.8	849.6	661.2	184.6	12.0	1.000224
11000.0	689.9	12.4	47.6	838.3	659.0	181.5	13.4	1.000219
11500.0	677.4	11.1	47.6	827.2	658.0	182.3	12.9	1.000214
12000.0	665.1	9.8	47.4	816.3	656.4	184.7	12.0	1.000209
12500.0	653.1	3.5	47.2	805.5	654.6	192.0	10.6	1.000204
13000.0	641.2	7.1	47.7	794.8	653.1	199.7	10.3	1.000200
13500.0	629.4	5.7	50.3	784.2	651.4	208.6	10.4	1.000197
14000.0	617.8	4.2	53.0	773.9	649.7	211.7	10.6	1.000194
14500.0	606.4	2.7	55.6	763.7	647.9	213.2	10.7	1.000191
15000.0	595.1	1.6	52.8	752.9	646.4	227.6	10.3	1.000186
15500.0	583.9	.7	44.2	741.8	645.2	234.8	10.0	1.000180
16000.0	573.0	-.1	34.9	730.0	644.2	232.3	8.9	1.000173
16500.0	562.2	-.0	21.9	718.5	644.1	221.9	8.0	1.000166
17000.0	551.5	-.7	17.0	704.9	643.2	203.4	7.7	1.000162
17500.0	541.1	-1.9	17.0	684.5	641.8	202.8	7.7	1.000159
18000.0	530.7	-3.1	17.0	664.3	640.4	200.8	7.7	1.000157
18500.0	520.6	-4.3	17.0	644.3	638.9	198.2	8.0	1.000154
19000.0	510.7	-5.5	17.0	624.4	637.5	193.5	8.0	1.000152
19500.0	501.0	-6.7	17.0	604.6	636.1	184.7	7.7	1.000149
20000.0	491.1	-7.9	17.2	584.8	634.7	175.4	7.3	1.000147
20500.0	481.4	-9.0	17.3	564.7	633.3	164.9	6.9	1.000144
21000.0	471.9	-10.2	17.5	544.8	631.8	162.8	6.6	1.000142
21500.0	462.6	-11.4	17.7	524.9	630.4	161.0	6.4	1.000140
22000.0	453.4	-12.6	17.9	505.0	629.0	154.3	6.6	1.000137
22500.0	444.7	-13.8	18.1	485.1	627.5	150.5	5.7	1.000135
23000.0	435.7	-14.9	18.2	465.6	626.1	154.5	6.5	1.000133

AX WIND DATA INVALID DUE TO MISSING MAX AZIMUTH AND ELEVATION ANGLES.

STATION ALTITUDE 3951.40 FEET MSL
21 JUNE 79 0750 HRS MST
ASCENSION NO. 35

UPPER AIR DATA
1720050055
APACHE

GEODETIC COORDINATES
32.62700 LAT DEG
106.39352 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES DLPPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (T) SPEED KNOTS	INDEX OF REFRACTION
4500.0	427.0	-15.1	19.4	578.7	624.7	162.6	1.000131
4400.0	416.0	-17.3	18.6	568.6	623.2	181.2	1.000129
4300.0	410.5	-18.5	18.5	561.2	621.8	194.4	1.000127
4200.0	402.2	-19.7	19.0	552.7	620.3	202.6	1.000125
4100.0	394.1	-20.7	19.0	543.7	617.0	211.3	1.000122
4000.0	385.0	-21.7	19.0	534.6	613.8	224.5	1.000120
3950.0	378.1	-22.7	19.0	525.8	610.0	243.4	1.000118
3900.0	370.4	-23.6	19.0	517.1	615.4	253.6	1.000116
3850.0	362.9	-25.2	19.6	509.5	613.5	260.1	1.000114
3800.0	355.2	-25.5	19.8	501.6	611.9	268.3	1.000113
3750.0	347.8	-27.1	19.3	492.4	611.1	267.0	1.000110
3700.0	340.5	-27.6	18.7	483.4	610.3	265.7	1.000108
3650.0	333.4	-28.4	18.1	474.6	609.5	265.3	1.000106
3600.0	326.4	-29.6	18.8	466.8	608.0	263.6	1.000105
3550.0	319.4	-30.9	19.9	459.4	606.3	263.0	1.000103
3500.0	312.7	-32.3	20.9	452.2	604.6	264.2	1.000101
3450.0	305.0	-33.7	22.0	445.1	602.9	263.2	1.000100
3400.0	298.5	-35.0	23.0	438.0	601.3	262.2	1.000098
3350.0	293.0	-36.0	21.1**	430.4	600.0	263.7	1.000096
3300.0	288.6	-37.2	14.9**	423.2	598.4	266.5	1.000095
3250.0	283.4	-38.4	8.6**	416.1	596.9	267.4	1.000093
3200.0	277.5	-39.5	2.4**	409.2	595.3	267.5	1.000091
3150.0	273.2	-40.7		402.0	594.0	267.6	1.000090
3100.0	268.3	-41.5		394.9	592.8	268.0	1.000088
3050.0	263.5	-42.5		387.5	591.0	272.2	1.000086
3000.0	258.5	-43.5		380.4	590.4	273.2	1.000085
2950.0	253.1	-44.8		374.0	588.7	277.7	1.000083
2900.0	248.6	-46.2		367.0	588.0	279.3	1.000082
2850.0	244.2	-47.7		361.9	585.0	281.6	1.000081
2800.0	239.9	-49.1		355.8	583.2	283.6	1.000079
2750.0	235.7	-50.5		349.9	581.4	284.9	1.000078
2700.0	231.5	-51.7		343.8	579.8	285.0	1.000077
2650.0	227.4	-52.8		337.4	578.2	285.1	1.000075
2600.0	223.4	-54.0		331.3	576.7	284.5	1.000074
2550.0	219.3	-55.2		325.4	575.1	284.0	1.000072
2500.0	215.8	-56.4		319.5	573.6	282.9	1.000071
2450.0	212.0	-57.6		313.6	572.0	281.5	1.000070
2400.0	208.4	-58.7		307.7	570.5	280.0	1.000069
2350.0	204.7	-59.9		302.1	568.9	278.5	1.000067
2300.0	201.5	-60.9		296.2	567.0	276.8	1.000066

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

UPPER AIR DATA
1720050055
APACHE

STATION ALTITUDE 9951.40 FEET MSL
21 JUL 79 0750 HRS MST
ASCENSION NO. 35

GEODETIC COORDINATES
32.62700 LAT DEG
106.39352 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES DEWPOINT CENTIGRADE	REL HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (T)	SPEED KNOTS	INDEX OF REFRACTION
43500.0	173.1	-61.5		289.9	566.7	275.2	50.2	1.000065
44000.0	171.8	-62.2		283.8	565.8	274.8	51.8	1.000063
44500.0	167.7	-62.9		277.8	564.9	274.7	53.5	1.000062
45000.0	163.8	-63.4		271.7	564.2	275.3	50.9	1.000061
45500.0	159.6	-63.7		265.5	563.8	276.1	47.2	1.000059
46000.0	155.7	-64.3		259.4	563.4	275.9	43.6	1.000058
46500.0	151.9	-64.3		253.4	562.9	275.0	39.9	1.000056
47000.0	148.2	-65.0		246.0	562.1	273.8	39.2	1.000055
47500.0	144.5	-65.2		242.9	560.9	272.4	40.1	1.000054
48000.0	140.9	-66.1		237.2	560.0	270.0	38.3	1.000053
48500.0	137.5	-66.4		231.8	560.2	268.0	34.4	1.000052
49000.0	134.1	-66.6		226.1	559.9	268.8	29.7	1.000050
49500.0	130.7	-66.9		220.3	559.5	275.4	24.2	1.000049
50000.0	127.5	-67.1		215.6	559.2	280.3	21.4	1.000049
50500.0	124.3	-67.4		210.5	558.8	279.0	21.9	1.000047
51000.0	121.3	-67.2		205.1	559.1	275.7	20.1	1.000046
51500.0	118.2	-67.2		200.0	559.0	261.5	13.0	1.000045
52000.0	115.3	-68.0		195.3	558.0	230.0	7.9	1.000044
52500.0	112.4	-68.7		191.6	557.0	199.2	4.8	1.000043
53000.0	109.6	-69.5		187.5	556.0	149.0	4.7	1.000042
53500.0	106.0	-70.2		183.5	555.0	190.8	4.5	1.000041
54000.0	104.2	-69.3		179.5	555.5	220.3	6.4	1.000040
54500.0	101.6	-69.3		173.5	555.2	202.9	5.4	1.000039
55000.0	99.0	-69.2		169.2	555.3	174.3	5.0	1.000038
55500.0	96.5	-69.8		165.4	555.5	169.1	5.5	1.000037
56000.0	94.1	-70.4		161.7	554.7	171.0	6.1	1.000036
56500.0	91.7	-71.0		158.1	553.8	176.2	6.5	1.000035
57000.0	89.4	-71.6		154.5	553.1	183.3	7.0	1.000034
57500.0	87.1	-71.5		150.5	553.3	181.1	7.1	1.000034
58000.0	85.0	-67.2		145.1	556.4	158.6	7.3	1.000032
58500.0	82.8	-67.2		140.1	559.1	139.7	8.4	1.000031
59000.0	80.8	-68.9		136.5	559.5	111.9	12.9	1.000030
59500.0	78.9	-60.7		132.9	559.8	99.6	18.7	1.000030
60000.0	75.9	-60.2		129.3	560.3	95.3	20.7	1.000029
60500.0	75.0	-64.4		125.1	562.9	92.2	20.8	1.000028
61000.0	73.2	-62.6		121.0	565.3	90.1	19.3	1.000027
61500.0	71.4	-60.8		117.1	567.7	89.7	15.0	1.000026
62000.0	69.7	-59.3		113.5	569.7	99.9	10.9	1.000025
62500.0	68.0	-54.1		110.5	570.0	109.6	12.3	1.000025
63000.0	66.4	-53.3		107.9	570.4	124.0	14.8	1.000024

STATION ALTITUDE 3951.40 FEET MSL 21 JUL 79 0750 HRS MST ASCENSION NO. 55			UPPER AIR DATA 1720050653 APACHE		GEODETIC COORDINATES 32.62700 LAT DEG 106.39352 LON DEG			
GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION, DEGREES (TM)	SPEED KNOTS	INDEX OF REFRACTION
63500.0	64.5	-53.5		105.2	570.8	130.3	15.9	1.000023
64000.0	63.3	-58.2		102.3	571.2	134.1	16.0	1.000023
64500.0	61.9	-57.9		100.0	571.3	133.6	15.5	1.000022
65000.0	60.3	-57.6		97.5	571.9	115.8	13.5	1.000022
65500.0	58.9	-57.4		95.0	572.3	94.5	13.1	1.000021
66000.0	57.5	-57.1		92.7	572.7	87.9	14.1	1.000021
66500.0	56.1	-56.9		90.4	572.9	85.4	15.3	1.000020
67000.0	54.8	-56.3		88.2	573.0	85.3	15.8	1.000020
67500.0	53.2	-56.6		86.1	573.0	89.0	15.1	1.000019
68000.0	52.2	-56.8		84.1	573.1	93.1	14.5	1.000019
68500.0	51.0	-56.7		82.1	573.1	101.1	15.8	1.000018
69000.0	49.8	-56.7		80.1	573.2	103.1	17.6	1.000018
69500.0	48.6	-56.6		78.2	573.3	110.9	18.9	1.000017
70000.0	47.5	-56.5		76.3	573.4	103.5	19.0	1.000017
70500.0	46.4	-55.9		74.3	574.2	100.1	19.2	1.000017
71000.0	45.3	-55.0		72.3	575.4	99.6	19.0	1.000016
71500.0	44.2	-54.3		70.4	576.3	92.4	19.1	1.000016
72000.0	43.2	-54.1		68.7	576.8	83.4	19.6	1.000015
72500.0	42.2	-53.9		67.0	576.9	83.5	20.3	1.000015
73000.0	41.2	-53.7		65.4	577.1	80.7	21.1	1.000015
73500.0	40.3	-53.5		63.9	577.4	80.1	21.8	1.000014
74000.0	39.3	-53.3		62.3	577.7	80.7	22.4	1.000014
74500.0	38.4	-53.1		60.8	578.0	81.2	23.0	1.000014
75000.0	37.5	-52.8		59.3	578.2	84.4	24.2	1.000013
75500.0	36.6	-52.6		57.9	578.5	88.1	25.6	1.000013
76000.0	35.8	-52.4		56.5	578.8	91.4	27.1	1.000013
76500.0	35.0	-52.2		55.1	579.1			1.000012
77000.0	34.2	-52.0		53.8	579.3			1.000012
77500.0	33.4	-51.3		52.5	579.6			1.000012

STATION ALTITUDE 9931.40 FEET MSL
21 JUNE 79 0750 HRS MST
ASCENSION NO. 59

MRN SIGNIFICANT LEVEL DATA
1720050055
APACHE

GEODETIC COORDINATES
32.62700 LAT DEG
106.39352 LON DEG

GEOPOTENTIAL ALTITUDE DECEMETERS	DIRECTION DEG (TN)	SPEED MPS	WIND DATA	N-S MPS	E-W MPS	DEW PT DEP DEG C	TEMPERATURE AIR DEG C	PRESSURE MILLIBARS
2059.	9999.**	9999.**	-9999.**	-9999.**	-9999.**	99	-51.7	3.300+1
2105.	95.	10.	10.	1.	-10.	99	-54.4	4.460+1
2132.	107.	10.	10.	3.	-8.	99	-56.5	4.700+1
2093.	107.	9.	9.	3.	-8.	99	-56.7	5.000+1
2014.	80.	8.	8.	-0.	-8.	99	-56.9	5.660+1
1830.	89.	6.	6.	-0.	-6.	99	-59.4	7.000+1
1821.	96.	11.	11.	1.	-11.	99	-66.5	7.720+1
1755.	150.	4.	4.	3.	-2.	99	-67.3	8.410+1
1751.	169.	4.	4.	4.	-1.	99	-71.4	8.600+1
1751.	183.	4.	4.	4.	0.	99	-71.6	8.960+1
1865.	186.	3.	3.	3.	0.	99	-69.0	1.000+2

** WIND DATA NOT COMPUTED DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.

STATION ALTITUDE 3951.40 FEET MSL
 21 JUNE 79 0750 HRS MST
 ASCENSION, MD. 30

MANDATORY LLVLS
 1720050055
 APACHE

GEODETL COORDINATES
 32.62700 LAT DEG
 106.39352 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	5111.	22.5	9.6	44.	9999.0	9999.0XX
800.0	6839.	20.9	8.2	44.	9999.0	9999.0XX
750.0	8665.	18.3	6.2	45.	9999.0	9999.0XX
700.0	10520.	15.0	2.7	49.	104.0	12.3
650.0	12620.	8.1	-2.5	47.	194.1	10.5
600.0	14765.	2.0	-5.5	57.	222.4	10.5
550.0	17055.	-9.	-22.5	17.	204.4	7.7
500.0	19524.	-6.8	-27.7	17.	163.9	7.7
450.0	22130.	-13.0	-32.3	18.	151.5	6.7
400.0	25026.	-20.0	-37.6	19.	204.5	10.6
350.0	28301.	-26.9	-43.5	19.	268.3	17.7
300.0	31898.	-34.9	-48.0	23.	282.5	34.0
250.0	35923.	-43.6			276.4	43.1
200.0	40774.	-50.1			263.5	49.8
175.0	43520.	-61.7			274.9	50.4
150.0	46227.	-64.5			274.5	36.7
125.0	50251.	-67.3			279.3	21.8
100.0	54636.	-69.0			167.4	5.0
80.0	58999.	-66.8			106.8	14.7
70.0	61624.	-59.4			89.2	11.8
60.0	64664.	-57.6			113.2	13.3
50.0	68552.	-56.7			106.9	17.1
40.0	73329.	-53.4			60.2	21.9

XX ALSO DATA INVALID DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.

STATION ALTITUDE 3951.40 FEET MSL
21 JUN 67 0750 HRS MST
ASCESSION NO. 99

MRN MANDATORY LEVELS
1720050055
APACHE

GEODETIC COORDINATES
32.62700 LAT DEG
106.39352 LON DEG

GEOPOTENTIAL ALTITUDE METERS	DIRECTION DEG (TN)	SPEED MPS	WIND DATA	N-S MPS	E-W MPS	DEW PT DEP DEG C	TEMPERATURE AIR DEG C	PRESSURE MILLIBARS
2830.	80.	11.		-2.	-11.	99	-53.4	4.000+1
2095.	107.	9.		3.	-0.	99	-56.7	5.000+1
1977.	113.	7.		2.	-0.	99	-57.6	6.000+1
1930.	59.	9.		-0.	-0.	99	-59.4	7.000+1
1795.	107.	8.		2.	-7.	99	-66.8	8.000+1
1695.	187.	3.		3.	0.	99	-69.0	1.000+2
1592.	279.	11.		-2.	11.	99	-67.3	1.250+2
1424.	275.	20.		-2.	20.	99	-64.5	1.500+2
1325.	275.	26.		-2.	20.	99	-61.7	1.750+2
1213.	253.	26.		-6.	25.	99	-56.1	2.000+2
1037.	270.	22.		-2.	22.	99	-43.6	2.500+2
972.	252.	17.		2.	17.	14	-34.9	3.000+2
860.	262.	9.		0.	9.	16	-26.9	3.500+2
765.	404.	5.		5.	2.	18	-20.0	4.000+2
670.	152.	3.		3.	-2.	19	-13.0	4.500+2
595.	164.	4.		4.	0.	21	-6.8	5.000+2
540.	204.	4.		4.	4.	22	-9	5.500+2
450.	222.	5.		5.	1.	06	2.0	6.000+2
385.	194.	5.		5.	0.	11	8.1	6.500+2
320.	124.	8.		8.	-9999.**	11	13.5	7.000+2
204.	9999.**	9999.**		-9999.**	-9999.**	12	18.3	7.500+2
400.	9999.**	9999.**		-9999.**	-9999.**	13	20.9	8.000+2
150.	9999.**	9999.**		-9999.**	-9999.**	15	22.5	8.500+2

** WIND DATA NOT COMPUTED DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.

THIS PAGE IS BEST QUALITY FRAGMENT
FROM COPY FURNISHED TO EOC